Province of the
EASTERN CAPE
EDUCATION

GRADE 8 MATHEMATICS MARCH CONTROLLED TEST

TERM 1 2024

TIME: 1 HOUR

MARKS: 50

INSTRUCTIONS:

1. Answer ALL questions.
2. Round off to 2 decimal places where applicable.
3. CALCULATORS MAY BE USED
4. Show all necessary steps in your working unless otherwise stated.
5. When answering questions, apply your knowledge, skills and insight.
6. Number the answers correctly according to the numbering system used in this question paper.
7. Write neatly and legibly.

Question 1 [8 Marks]

(a) List the set of all the factors of 16 (1)

(b) Which number is both a factor and a multiple of 15? (1)

(c) Which of the following: 36, 18, 6, 3 and 8

(i) are factors of 12? (1)

ii) are multiples of 12? (1)

(d) List all the factors of 24 which are prime numbers (1)

(e) List the four lowest multiples of 60 (1)

(f) List the factors of 60 which are perfect squares (1)

(g) Give one example of a perfect cube (1)

Question 2 [6 Marks]

Complete the tables below as instructed.

Write as a common fraction in its simplest form	**Write as a decimal fraction**	**Write as a percentage**
$\frac{2}{3}$	a)	b)
c)	0,48	d)
e)	f)	55%

Question 3 [10 Marks]

(a) In a class of 15 people, 20% are boys. How many girls are there? (2)

(b) A box contains 120 sweets. Ali, Billy and Caleb share the sweets in the ratio 4:7:1. Work out how many more sweets Billy receives than Ali. (4)

(c) A dog runs from one side of a park to the other. The park is 80 meters across. The dog takes 16 seconds to cross the park. What is the speed of the dog? (2)

(d) If you borrow R1000 and the interest charged is 12% per year, how much would you pay back if:

a) You took 5 years to pay it back? (2)

Question 4 [5 Marks]

Calculate the following.

(a) $(\sqrt{25})^2 - (\sqrt{4})^2$ (1)

(b) $\sqrt[3]{27} + \sqrt{121}$ (1)

(f) $100^2 \times \sqrt[3]{1000}$ (1)

(g) $\sqrt[3]{125} + \sqrt{25} + 5^2$ (1)

(h) $\sqrt{11\frac{1}{9}}$ (1

Question 5 [4 marks]

Fill in a number in the box to make the number sentence true.

(a) $8 - \square = -14$ (b) $6 + \square = -3$

(e) $6 \div \square = -\frac{1}{2}$ (f) $-3 - \square = 4$

Question 6 [12 marks]

Fill in the answers without the use of a calculator (show working where necessary)

(a) $5 - (28 \div 7) + (-3)$ (2)

(b) $\frac{(-12)(3)}{1-10}$ (2)

(d) $18 \div -6 + 3 \div -1$ (2)

(f) $3 - (-2)^2 + 2 \times -7 - 4$ (2)

Question 7 [8 Marks]

(8.1)

Find the answers to the following. Give your answers in simplest fraction form and show all your working out:

(8.1.1) $\frac{3}{6} + \frac{4}{5}$

(8.1.2) $\frac{3}{7} \times \frac{1}{9}$

(8.1.3) $5 \div \frac{4}{7}$

(8.1.4) $\frac{5}{8} \div \frac{5}{6}$